ABSTRACT OF THE DISCLOSURE

The present invention relates to a polymer for data storage that is sensitive to a light source, a data storage media coated by the same, and a data storage device and method using the data storage media. In particular, the present invention relates to a polymer for data storage comprising two of the functional group of disperse red 1, which is a photoresponsive organic dye, bonded to a branched chain per every repeat unit, a data storage media coated by the same, a reversible and optical data storage device containing a thin film, and a data storage method using the device.